What Is Claimed Is:

    1.   A storage control subsystem that can communicably
connect to a host, comprising:

        a disk portion that stores data sent by the host;

        a channel control unit that constitutes an interface
with the host;

        a disk control unit that is connected to the disk
portion and constitutes an interface with the disk portion;

        a cache memory unit that temporarily stores data that
is sent and received to and from the channel control unit and
the disk control unit; and

        control memory that stores information on the
constitution of a plurality of logical volumes formed by means
of disk allocation,

        wherein the control memory comprises:

        online information indicating whether a logical
volume in the disk array is online; and

        information on the path between the online logical
volume and the host to which the online logical volume is
connected.

    2.   The storage control subsystem according to claim 1,

wherein, when information from the host regarding path cancellation with respect to the online logical volume is received, the host cancels the path of the designated logical volume.

3. The storage control subsystem according to claim 1, wherein, when information for obtaining online information on the logical volume is received from the host, the logical volume online information is reported to the host.

4. The storage control subsystem according to claim 1, wherein, when information for obtaining online information on the logical volume is received from the host, the logical volume online information is displayed.

5. The storage control subsystem according to claim 1, wherein, prior to recovery of the logical volume or when recovery instruction information for the logical volume is received, the online information for the logical volume is displayed.

6. The storage control subsystem according to claim 1, wherein, prior to recovery of the logical volume or when recovery instruction information for the logical volume is

received, the online information for the logical volume is reported to the host.

7. The storage control subsystem according to claim 1, wherein:

when a first command for online status confirmation of the plurality of logical volumes is received from the host, online information on the plurality of logical volumes is reported to the host; and

when, after the first command has been reported, a second command for path cancellation with respect to at least part of the plurality of logical volumes is received from the host, the path of the designated logical volume is cancelled.

8. The storage control subsystem according to claim 1, wherein:

after all recovery-destination logical volumes have been brought offline, recovery of the logical volumes is possible.

9. The storage control subsystem according to claim 1, wherein, when path cancellation information is received from the host, the control memory functions so that the path cancellation is not executed.

10. The storage control subsystem according to claim 1, wherein:

the storage control subsystem receives a referral request for the online information and the path information from the host via another storage control subsystem; and,

when information on the path cancellation with respect to the online logical volume is received from the host via the other storage control subsystem, the path cancellation with respect to the designated logical volume is executed.

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11. The storage control subsystem according to claim 10, wherein, when the path cancellation information is received from a host connected via the other storage control subsystem, the control memory functions so that the path cancellation is not executed.

12. A storage control subsystem connected to one or more host devices, comprising:

a channel control unit that controls communications with the connected host device(s);

a plurality of logical volumes prepared on one or more physical storage devices;

a disk control unit that controls the plurality of

logical volumes; and

control memory in which, for each of the plurality of logical volumes, volume discrimination information, ON/OFF information indicating whether an online state exists, and, in the event of an online state, path group information with regard to which host device(s) the subvolume is connected to, are recorded, wherein:

as a result of receiving a specific command from a certain host device, the channel control unit performs, before a target regular volume and target subvolume among the plurality of volumes are paired and data in the target regular volume is copied to the target subvolume, a first examination of whether the target subvolume is in an online state on the basis of the ON/OFF information on the target subvolume, and, when, as a result of this first examination, the target subvolume is known to be in an online state, the channel control unit performs a second examination with regard to which separate host device the target subvolume is connected to on the basis of path group information on the target subvolume; and

the result of the second examination is sent from the channel control unit to the certain host device.

13. The storage control subsystem according to claim 12,

wherein:

a plurality of volume groups containing two or more logical volumes exist in the plurality of logical volumes;

volume-group discrimination information for each of the plurality of volume groups and two or more volume discrimination information items corresponding with two or more logical volumes contained in these volume groups are recorded in the control memory;

the storage control subsystem performs a first examination of whether the two or more subvolumes are in an online state based on two or more ON/OFF information items corresponding with two or more subvolumes in a target subvolume group containing the target subvolume; and,

when it is clear as a result of the first examination that the target subvolume among the two or more subvolumes is in an online state, the storage control subsystem performs the second examination with respect to the target subvolume and sends the result of the second examination to the certain host device.

14. The storage control subsystem according to claim 13, wherein:

a first examination command that includes volume-group discrimination information on the target

subvolume group is received from the certain host device, and, in response to the first examination command, the first examination is performed and the result of the first examination is sent to the certain host device; and

a second examination command, which includes volume discrimination information on the target subvolume that has been judged as being in an online state based on the first examination result, is received from the certain host device, and, in response to the second examination command, the second examination is performed and the result of the second examination is sent to the certain host device.

15. The storage control subsystem according to claim 13, wherein:

the ON/OFF information is one-bit information expressed by 1 or 0;

two or more one-bit information items corresponding with two or more subvolumes included in the target subvolume are included in the first examination result;

the certain host device stores, for each of the plurality of volume groups, a volume-group discrimination number, and a volume management table in which two or more volume discrimination numbers corresponding with two or more logical volumes contained in the volume group are recorded in

this number order; and

when an input of a volume discrimination number for the one or more target subvolumes is received from the user, the first examination command that includes the volume discrimination number of the target subvolume group containing the target subvolume is generated and sent to the storage control subsystem, and, when the first examination result is received in response to this first examination command, it is judged whether the one or more target subvolumes is online on the basis of the two or more one-bit information items included in the first examination result, the one or more volume discrimination numbers inputted by the user, and the volume management table; and, when it is judged that at least one target subvolume is in the online state, the second examination command is generated for the target subvolume and then sent to the storage control subsystem.

16. The storage control subsystem according to claim 12, wherein, when the certain host device issues a copy command after volume discrimination information for the target regular volume and volume discrimination information on the target subvolume have been input by the user and/or issues a recopy command for copying once the paired state of the target regular volume and target subvolume has been cancelled and the paired

state then reformed:

an examination command that includes volume discrimination information on the target subvolume is generated and sent to the storage control subsystem; and

the first and second examinations are performed before the target regular volume and the target subvolume are paired and data in the target regular volume is copied to the target subvolume.

17. The storage control subsystem according to claim 12, wherein:

the certain host device receives a copy instruction from the user and issues a copy command in response to the copy instruction after volume discrimination information for the target regular volume and volume discrimination information on the target subvolume have been inputted by the user and/or issues a recopy command for copying once the paired state of the target regular volume and target subvolume has been cancelled and the paired state then reformed; and

when the storage control subsystem receives the copy command or recopy command, before executing copy processing on the basis of the command, the storage control subsystem performs a first examination by referencing ON/OFF information corresponding with discrimination information on the target

subvolume that is included in this command, executing copy processing on the basis of the copy command or recopy command upon judging that the target subvolume is in the offline state as a result of the first examination but, on the other hand, executing the second examination upon judging that the target subvolume is in the online state as a result of this first examination.

18. The storage control subsystem according to claim 12, wherein, instead of or in addition to performing the second examination, the storage control subsystem switches the target subvolume from the online state to the offline state when it is judged that the target subvolume is in the online state as a result of the first examination.

19. The storage control subsystem according to claim 18, wherein the storage control subsystem switches the target subvolume from the online state to the offline state in at least one of cases (1) to (3) below:

(1) when a setting cancellation command that includes discrimination information on the target subvolume is received from the certain host device after the second examination result is sent to the certain host device;

(2) when path group information corresponding with the

target subvolume is referenced, an inquiry is made with regard to whether the connection thereof with all or part of one or more separate host devices specified based on the path group information may be cancelled, and a reply relaying that the connection may be cancelled is then obtained in response to this inquiry; and

(3) when a predetermined time has elapsed after judging that the target subvolume is in an online state.

20. The storage control subsystem according to claim 12, wherein, when a separate storage control subsystem is connected to the storage control subsystem, the target regular volume exists in the storage control subsystem and the target subvolume exists in the separate storage control subsystem:

the separate storage control subsystem references the control memory in the system, performs the first and second examinations, and sends the results of the first and second examinations to the certain host device.